

AMD Opteron™ Processor 200 Series AdvancedTCA® RDK

Overview

The AMD Opteron™ processor 200 series AdvancedTCA Reference Design Kit (RDK) is a rugged, NEBS compliant blade designed with the latest AMD Opteron processor with dual-core technology. It is designed to provide a highly configurable and scalable platform for deployment in carrier-grade environments. The RDK is a ready-made way for companies to develop products quickly for the fast-growing ATCA market with solutions that address customer demand for industry-standard, high-performance telecommunication products. Driven by the AMD Opteron processor, the RDK enables companies to make maximum use of widely available x86 application software and deliver high performance for a remarkably low entry price point. The telecommunications industry is evolving and recognizing the need for standards-based hardware solutions. The ATCA blade standard reduces the “barrier to entry” for solutions. The AMD AdvancedTCA® RDK shortens product development cycles by providing companies with the design collaterals necessary to develop solutions for the ruggedized requirements of the telecommunications market. These telecommunications customers want solutions from vendors that meet those tough requirements – the RDK gets the vendor companies there quickly.

Technology

The AMD Opteron blade can be quickly and easily integrated with other AdvancedTCA compliant, open-architecture, modular components to deploy high-performance application solutions. The PICMG 3.0 core AdvancedTCA specification provides the advantages of being focused on the definition of an architecture. It enables reduced development time and costs, and offers high levels of modularity and configurability. Also, its improved power distribution and management offers an advanced software infrastructure providing operating systems, application programming interface (API), and operation, administration, management, and provisioning (OAM&P).

Key features

- PICMG 3.0
- NEBS Compliant
- AMC x2
- High Availability
- ISO 9001: 2000
- ISO 14001: 2004
- ISO 13485
- TL9000



Main features

- AMD Opteron 200 Series processors, 55W single- or dual-core
- 4 DIMM sockets for a total of 8GB of main DDR1 memory (PC3200)
- 2 x AMC .1 slot
- IPMI v1.5 support
- Dual Gigabit Ethernet base interface
- Dual Gigabit Ethernet fabric interface
- Boot from network or AMC disk drive
- RoHS compliant

AMD Opteron™ Processor 200 Series AdvancedTCA RDK

Specifications

Front panel I/O

- Connectors 2 x USB
- 1 x Communication Port
- 2 x Gigabit Ethernet
- 1 x Reset Switch
- LEDs 1 x Blue Hot Swap LED
- 1 x Red OSS LED
- 1 x Green User LED
- 1 x Amber User LED

OS support

- SUSE Linux® Enterprise Server 9.0

Physical specifications

- Single slot, 8U compatible
- 280mm x 322mm board form factor
- 30.48mm wide (1.2") board to board pitch
- PCB thickness: 1.6mm x 2.4mm
- Alignment/key pins
- EMC gasket on the left side of the board
- Handle actuator micro switch for Hot Swap
- Front panel (1mm thickness)
- Two front panel handles
- ZD connectors for Data Transport Plane
- Dual redundant power feeds: -48VDC/-60VDC +/- 5%

Backplane interconnect

- Gigabit Ethernet

Chipsets

- Broadcom North Bridge
- Broadcom South Bridge
- GigE Switch (TBD)

Thermal profile

- Maximum power dissipation of 200W per board per PICMG 3.0 specification

Electrical, signaling and mechanical specifications

AdvancedTCA Core Specification PICMG 3.0

- IPMI v1.5
- NEBS Level-3 and ETSI Installations
- IPMC Intelligent Platform Management Controller

About AMD

AMD (NYSE:AMD) designs and produces innovative microprocessors and low-power processor solutions for the computer, communications, and consumer electronics industries. AMD is dedicated to delivering standards-based, customer-focused solutions for technology users, ranging from enterprises and governments to individual consumers.

www.amd.com

One AMD Place
P.O. Box 3453

Sunnyvale, CA 94088-3453, USA

Tel: 408-749-4000 or 800-538-8450

TWX: 910-339-9280

TELEX: 34-6306

Technical Support

USA & Canada: 800-222-9323, Opt 2 or 408-749-5703

USA & Canada PC Processors Only: 408-749-3060

USA & Canada E-mail: hw.support@amd.com

Latin America E-mail (Spanish): amdsp@vermont.com.br

Latin America E-mail (Portuguese): amdbtr@vermont.com.br

Argentina: 0800-333-0219

Brazil: 0800-557686

Chile: 123-00-209-110

Mexico: 01-800-123-4709

Europe & UK: +44-0-1276-803299

Europe & UK Fax: +44-0-1276-803298

France: 0800-908-621

Germany: +49-89-450-53199

Italy: 800-877224

Europe E-mail: euro.tech@amd.com

China Fax: 86-10-8518-1777

Hong Kong Fax: 852-2956-0588

Japan Fax: 81-3-3346-7848

Korea Fax: 82-2-3468-2601

Taiwan Fax: 886-2-2655-7855

Asia E-mail: asia.support@amd.com

Literature Ordering

On the Web: www.amd.com/support/literature.html

USA & Canada: 800-222-9323, Opt 1

USA & Canada E-mail: amd.literature@comac.com

Europe E-mail: euro.lit@amd.com

China Fax: 86-10-8518-1777

Hong Kong Fax: 852-2956-0588

Japan Fax: 81-3-3346-7848

Taiwan Fax: 886-2-2655-7855

©2007 Advanced Micro Devices, Inc. All rights reserved.

AMD, the AMD Arrow Logo, AMD Opteron, and combinations thereof, are trademarks of Advanced Micro Devices, Inc. Linux is a registered trademark of Linus Torvalds. Other names are for informational purposes only and may be trademarks of their respective owners.